



Assessing the Impact of a Webinar, Harm Reduction in Practice: An Exploration of Medical Stigma and Safe Injection Sites

LC 9, in collaboration with Over-the-Rhine Community Housing

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Introduction





Over-the-Rhine Community Housing: Jimmy Heath House

- Supportive housing site: “**housing-first**”
 - Residents are not denied/displaced due to drug or alcohol use

- Serves **chronically homeless** population
 - Homeless for at least **6 cumulative months** in the past year
 - Associated with job instability, loss of social support, high rates of mental illness



Project & Goals

Project: Present a webinar to medical students to introduce the concepts of addiction medicine and harm reduction, and conduct a survey to assess the effectiveness of this presentation on meeting our goals

Goals:

- Introduce the concept of addiction, or substance use disorder, as a medical diagnosis prompting medical care
- Inform students of the current data available on the efficacy of various harm reduction interventions
- Assess the familiarity students have with harm reduction practices both before and after the presentation
- Observe the influence of stigma on discussions surrounding harm reduction and addiction medicine

Figure 9. Hamilton County resident deaths due to unintentional overdose by drug*; 2008 - 2019*

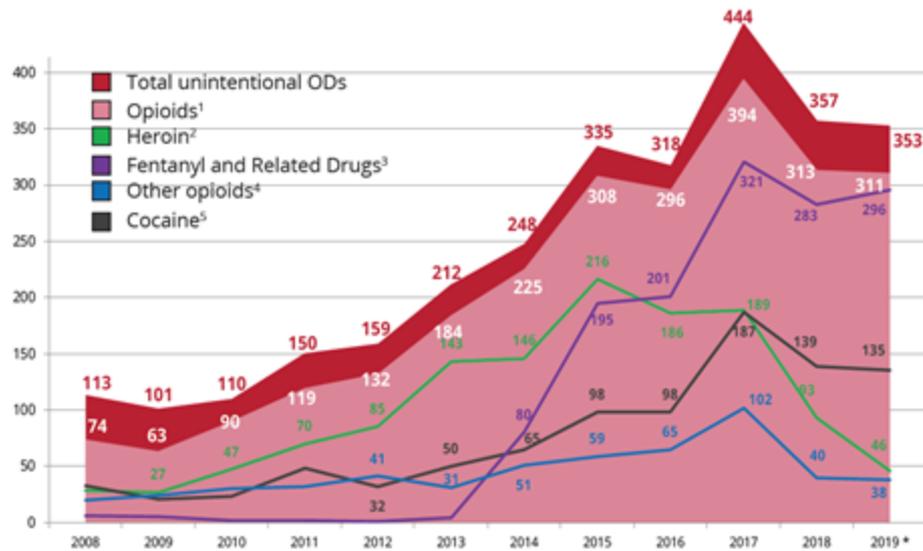
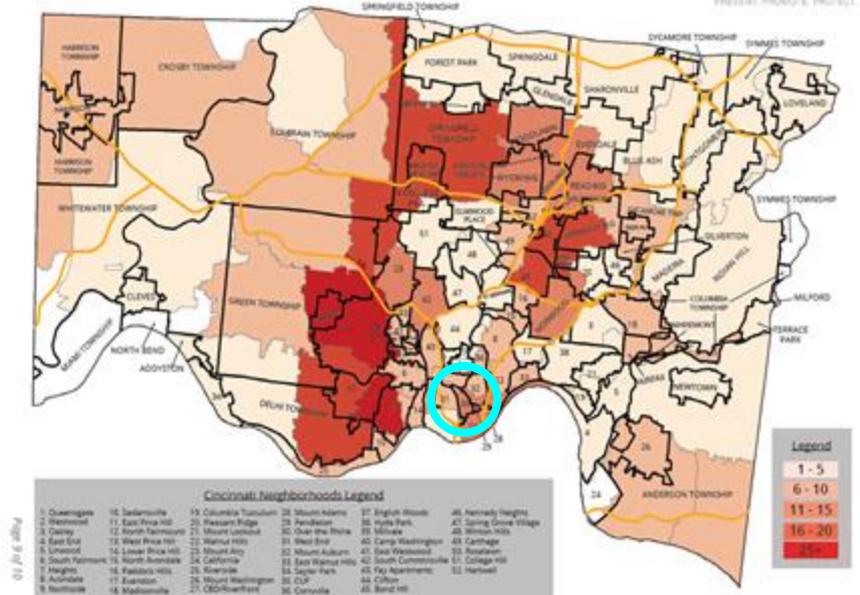


Figure 11. Home ZIP code of drug overdose deaths; Hamilton County, 2019*

The map presents unintentional overdose deaths of individuals home zip code. The 2019 death counts provided here are preliminary and are subject to change.



Q: Why did we choose to explore stigma and the efficacy of harm reduction measures?

A: High incidence of overdose deaths in the community. Need alternative solutions other than current practices.



What is harm reduction?

- “Harm reduction is an umbrella term for **interventions aiming to reduce the problematic effects of behaviors.**”
- Harm reduction techniques approach the **middle point** between total abstinence and continued harmful use/behavior.
- Harm reduction techniques recognize a person engaging in risk-taking behaviors **may not be ready for change**, but **supports any step in the right direction.**

Harm Reduction in Practice: An Exploration of Medical Stigma and Safe Consumption Sites

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Class of 2024, LC 9
Guest speakers:
Officer Conor King
Hilja Ruegg, MD

Learning Objectives

1. Summarize the history of the OTR neighborhood's development and residents.
2. Define harm reduction and identify existing harm reduction techniques.
3. Summarize research on health and societal outcomes of existing safe injection sites around the world.
4. Recognize the role medical providers play in harm reduction.
5. Gain perspectives on the personal history, challenges, and potential solutions shared by a person who uses IV heroin.
6. Learn about the implementation, legal status, challenges, and successes of safe injection sites from a Canadian law enforcement officer who works in British Columbia.



Methods





Presentation

- Assessed existing data on harm reduction techniques including safe injection sites and needle exchange sites
- Interviewed a law enforcement officer who works closely with an existing safe consumption site in Canada
- Interviewed a physician who has experience working with individuals diagnosed with substance use disorder
- Interviewed a resident of Jimmy Heath House who currently experiences opioid addiction
- Assembled components into Google Slides presentation, which was virtually presented by the members of our Learning Community to a group of medical students through a Webex Meeting



Survey

- Assembled survey questions to assess prior understanding of harm reduction techniques and understanding of the influence of stigma on care for people with addiction disorders
- Distributed survey to students prior to attending the webinar, and distributed an identical survey following the webinar to assess students' change in attitudes on stigma and self-identified understanding of harm reduction



Survey Design and Analysis

- Students were surveyed before and after the webinar, with the survey results collected anonymously.
- Fifty-six (56) students responded before the webinar and thirty-three (33) responded after the webinar. Fourteen (14) identical questions were asked in each survey, with respondents choosing from five (5) options on a Likert scale, with values ranging from one (1) to five (5).
- Results were analyzed using JASP statistical software and Microsoft Excel 365.
 - In JASP, Mann-Whitney t-tests were used to obtain p-values with an assigned alpha of 0.05.
 - In Excel, applying the Likert values, the mean and 95% confidence interval (confidence.t function) were calculated with the Likert values



Results



Average Likert Reponse Score between Pre-Webinar and Post-Webinar Survey Questions



Survey Question	Pre-Webinar Response Mean (n=56)	Post-Webinar Response Mean (n=33)	P-Value	Pre-Webinar CI	Post-Webinar CI
I have a strong understanding of harm reduction techniques.	2.71	4.18	<0.001	0.26	0.19
I would like to learn more about harm reduction and treatment for opioid use disorder.	4.43	4.39	0.592	0.19	0.22
Harm reduction techniques are a form of treatment for substance use disorders.	3.59	4.42	<0.001	0.26	0.27
The risks of harm reduction techniques outweigh their potential benefits.	2.34	2.24	0.400	0.27	0.43
I would support harm reduction initiatives as a medical intervention.	4.13	4.48	0.024	0.22	0.24
There should be more research to study the effectiveness of harm reduction techniques.	4.32	4.70	0.014	0.20	0.19
Most people believe that a person who is addicted to opioids cannot be trusted.	3.86	3.67	0.228	0.22	0.28
Most people believe that a man who is addicted to opioids is dangerous.	3.84	3.73	0.437	0.20	0.27
Most people think that a person who is addicted to opioids is to blame for his or her problems.	3.59	4.03	0.007	0.22	0.23
Most people believe that a person who is addicted to opioids is lazy.	3.32	3.67	0.090	0.25	0.25
I believe that a person who is addicted to opioids cannot be trusted.	2.43	2.09	0.118	0.27	0.30
I believe that a man who is addicted to opioids is dangerous.	2.36	1.82	0.010	0.26	0.21
I think that a person who is addicted to opioids is to blame for his or her problems.	1.55	1.48	0.919	0.20	0.20
I believe that a person who is addicted to opioids is lazy.	1.39	1.45	0.565	0.15	0.20



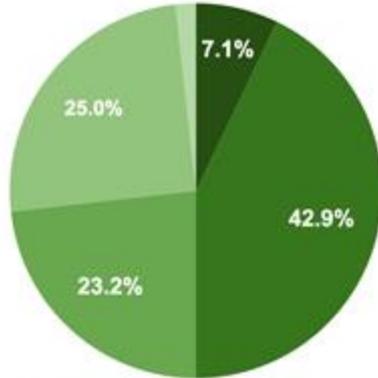
Proof of Concept

The survey results show that our webinar successfully serves as a “proof-of-concept” for similar webinars to significantly enhance medical education surrounding issues of addiction, substance use, and harm-reduction in a first year medical curriculum.

Survey results indicated...

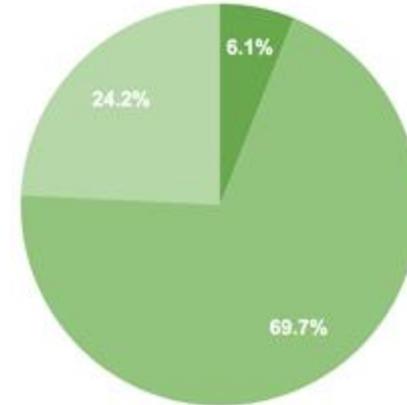
- Students gained a deeper understanding of harm reduction techniques after watching the webinar
- Students were more likely to consider harm reduction a form of treatment for substance use disorders after seeing the webinar
- Students' measures of stigma for opioid users were largely unchanged after viewing the webinar

Pre-Seminar: I have a strong understanding of harm reduction techniques.



● Strongly disagree ● Somewhat disagree ● Neither agree nor disagree
● Somewhat agree ● Strongly agree

Post-Seminar: I have a strong understanding of harm reduction techniques.

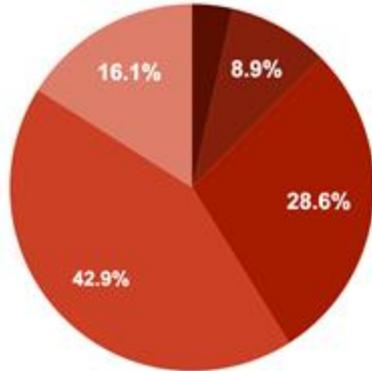


● Neither agree nor disagree ● Somewhat agree ● Strongly agree



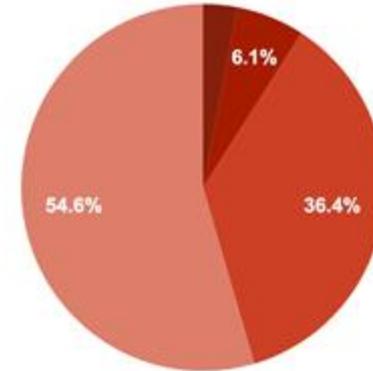
Students gained a deeper understanding of harm reduction techniques after watching the webinar

Pre-Seminar: Harm reduction techniques are a form of treatment for substance use disorders.



● Strongly disagree ● Somewhat disagree ● Neither agree nor disagree
● Somewhat agree ● Strongly agree

Post-Seminar: Harm reduction techniques are a form of treatment for substance use disorders.



● Somewhat disagree ● Neither agree nor disagree ● Somewhat agree
● Strongly agree



Students were more likely to consider harm reduction a form of treatment for substance use disorders after seeing the webinar



Discussion



Data Interpretation

- Students were more likely to consider harm reduction techniques as a form of treatment after viewing the webinar
 - Unsure whether this change is due to presentation an increased understanding of harm reduction
- First-year medical students have generally favorable impressions of people who struggle with opioid addiction both before and after viewing the webinar.
 - Medical students may be more resistant to making stigmatizing generalizations than other populations due to other aspects of the curriculum
 - Still need specific education such as this webinar to develop more complete understanding of complex psychosocial disorders such as addiction.



Limitations

- Our audience was a representative sample of first year medical students, so our findings cannot be applied to medical students in later years or other healthcare practitioners.
- Because the survey design emphasized respondent privacy, a within-subject analysis of how individuals' answers changed after watching the webinar could not be conducted.
- Survey results were collected within 48 hours of viewing the webinar, so whether the observed changes will endure over a longer time period cannot be determined.
- Future studies could examine the effect of this webinar's materials on different class years, students of different schools or professional fields, and specific within-subject effects.

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Questions?

